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(21) International Application Number: PCT/GB00/00969 (22) International Filing Date: 15 March 2000 (15.03.00) (30) Priority Data: 9906096.4 18 March 1999 (18.03.99) GB (71) Applicant (for all designated States except US): GROUND- FLOW LIMITED [GB/GB]; <del>29 High Street, Marlborough,</del> <del>Wiltshire SN8 1LW (GB)</del> SONDEX LIMITED - 2 (72) Inventors; and (75) Inventors/Applicants (for US only): MILLAR, John, William, - 1 Aidan [GB/GB]; <del>The Flat, Northmarsh Farm, Northmarsh</del> <del>Road, Wootton Bassett, Swindon, Wiltshire SN8 6BN</del> (GB); CLARKE, Richard, Hedley [GB/GB]; 21 Tin Pil, Marlborough, Wiltshire SN8 1BD (GB). STUART-BRUGES, WILLIAM PETER - 3 (74) Agent: COHEN, Alan, Nicol; 2 Grove Place, Tatsfield, Westerham, Kent TN16 2BB (GB).	(81) Designated States: CA, NO, US, European patent (AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE).  Published With international search report. Before the expiration of the time limit for amending the claims and to be republished in the event of the receipt of amendments. 1. KENNETH VIEW FYFIELD MARLBOROUGH WILTSHIRE SN8 1PU GB 2. FORD LANE BRAMSHILL HOOK HAMPSHIRE RG27 0RH GB 3. MANOR FARM HOUSE DEANE BASINGSTOKE HAMPSHIRE RG25 3AS GB	

(54) Title: METHOD FOR DOWNHOLE LOGGING

## (57) Abstract

A method and apparatus for measuring the properties such as permeability of the rock surrounding a borehole in which a directional seismic or sonic signal is generated downhole and propagated into the surrounding formation to generate an electrokinetic signal and the focus of the seismic signal is moved in three dimensions in the surrounding rock by physically moving the source or by having two seismic sources which generate oscillating seismic signals at different frequencies and the focus of the seismic signal is varied by wave interference or wave interaction.

